# *Report to the Auburn City Council*

Action Item 2

Agenda Item No.

City Manager Approval

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| **To:** | Mayor and City Council Members |
| **From:** | Valerie Harris, Chief of Police |
| **Date:** | April 27, 2009 |
| **Subject:** | Notification of Application for the Placer County Indian Gaming Local Community Benefit Committee Grant |

***The Issue***

Should the City Council authorize the acceptance of funds if the Police Department is awarded grant monies from a submitted application for the Placer County Indian Gaming Local Community Benefit Committee Grant (LCBC) in the amount of $37,270.97?

***Conclusion and Recommendation***

Based on our research, Staff is recommending that the City Council authorize the Police Department to accept the grant funds if they are awarded. The grant will provide the Police Department up to $37, 270.97 from the Indian Gaming Special Distribution Fund, for the purpose of purchasing one Automated License Plate Recognition (LPR) System and the accompanying hardware and software.

***Background***

The Auburn Police Department is continually working to improve the safety, operations and efficiencies of patrol services, while utilizing technology to enhance safety and improve operational effectiveness. This effectiveness includes tools that will improve our ability to identify vehicles associated with criminal activity. This grant will assist with obtaining a LPR with funding available from a LCBC grant, and the ability to expand and roll out additional LPR's as funding becomes available.

Within the past several years, LPR systems have been utilized throughout Europe and the United States. The promising results have led more law enforcement agencies to consider the possible benefits of LPR technology. Using license plate recognition technology for other applications is widespread—in many developed countries, including the U.S., for example, plate recognitions are frequently used to help monitor electronic toll collection networks. Plate recognitions have also been used as an intelligence-gathering tool and in surveillance operations. However, most agencies are using plate-recognition technology as a law enforcement tool with the potential of proactively addressing criminality—especially vehicular crime, including auto-theft.

LPR technology is one of the most reliable and mature video analytic technologies available today. From parking access control to stolen vehicle and self-excluded patron identification, Cameras combined with the computer software can improve self-exclusion programs along with the safety, and security of any risk managed environment.

LPR solutions enable law enforcement to automatically identify and intercept stolen vehicles and wanted persons, and other designated individual vehicle owners before entering or leaving an area. This proactive technology has being introduced into the law enforcement community and been proven to be highly successful. Officers immediately know if there is a situation with a vehicle that needs further investigation or caution, and the homeland security component is enhanced by the capability to review vehicles before and after certain situations where large crowds and important events are located.

LPR systems operate independently and do not require an officer's constant attention - enhancing officer safety by keeping hands on the wheel and eyes on the scene. LPR's works at patrol and highway speeds - oncoming differential speeds in excess of 120MPH and passing speeds in excess of 75MPH+. LPR's translates the read plate data into a digital image, checks versus an onboard wanted or stolen list, and returns an alarm back to the operator in milliseconds for appropriate interdiction. Cameras are able to read up to four lanes of traffic with a single vehicle. Efficient High Speed cameras allow officers to read 8-10,000 plates in just one shift with just a single vehicle mount. Unit is easily and rapidly transferable to a variety of police vehicles and the processor unit is the size of a small box for easy storage in trunk of a vehicle.

LPR technology that is capable of "reading" plate numbers uses a complicated system of algorithms, cameras, databases, and police intelligence to be successful. Foremost, plate recognition technology requires the use of infrared cameras with optical character recognition software. These cameras can be attached to police cars or other mobile units (along highways or other frequently passed roads); or used as hand-held units that police officers can take to a variety of locations throughout a jurisdiction; or placed in fixed locations (overpasses). The accuracy of plate recognitions at various speeds is contingent on a variety of factors, including camera quality, weather conditions, and the existence of common obstructions (like dirt and general plate wear-and-tear) that can obstruct the camera's view.

To read plate numbers accurately, infrared cameras use software with a number of algorithms to identify license plate characters. These algorithms include: Plate Localization (or Image Acquisition), in which a camera identifies a license plate; Plate Extraction and Normalization, in which a camera detects the dimensions of a plate, by compensating for any skewing, adjusting for brightness and contrast, and filtering out any unwanted objects; Character Segmentation, in which a license plate sequence is segmented into individual characters; and Character Recognition, in which the segmented characters are matched to a template of letters and numbers.

Because an LPR operates in real-time, the LPR system may increase the probability that the police detect a wanted vehicle that is occupied. The occupant may be the suspect, or at least, the occupant may be someone linked to the suspect, thus some form of clearance rate (arrest, prosecution, conviction).

The issues of privacy are mitigated by the fact that the software performs the same process as an officer, but faster and more objectively. A signal occurs only when a vehicle is on an appropriate database and the retention of license plate data on other vehicles can be immediately purged or kept for a specific period of time.

***Alternatives Available to Council; Implications of Alternatives***

1. Proceed with Staff Recommendation
2. Do not proceed with staff recommendation

***Fiscal Impact***

If awarded, the funds will be distributed directly to the City of Auburn by the State Controller. Based on the estimated cost of the LPR system, the Police Department budget will have to cover an additional $2750.00.